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50. (New) The apparatus according to claim 46, wherein said lower wall of said chuck is adapted to drive rotation of said can end and said can body while said chuck holds said can end onto said can body.

51 (New) The apparatus according to claim 46, wherein said juncture between said upper and lower walls of said chuck is adapted to drive rotation of said can end and said can body while said chuck holds said can end onto said can body.

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REMARKS

Claims 1-10 were pending in this application and have been cancelled. New claims 11-51 have been added. Therefore, upon entry of the foregoing amendment, claims 11-51 will be pending in this application.

A substitute specification is being filed concurrently with the present Supplemental Preliminary Amendment in response to a request therefore the Notice to File Missing Parts. The substitute specification has been prepared by retyping the as-filed specification. Although no new matter has been added in the retyping, the retyping has changed the pagination of the specification. Therefore, the citations provided below are with respect to the pagination of the substitute specification.

Further, Applicants submit an amendment to the Cross Reference to Related Applications to update information and to correct an inadvertent typographical error.

The current application claims priority, through several continuation applications, from Application Serial No. 08/945,698 (now U.S. Patent No. 6,065,634), claims 9 and 10 of which, as originally filed, recited a method of forming a double seam between a can body and a can end. Such method claims were subject to a restriction requirement and have not heretofore been examined. By the foregoing amendment, Applicants cancel all the original claims and submit new claims that recite methods of forming a double seam between a can body and a can end. Applicants also submit new claims directed to the apparatus for seaming a can end onto a can body.

Support for the claimed methods is generally provided, *inter alia*, at page 6, line 9 through page 7, line 13, of the instant application, as well as Figures 5 through 8. In particular, support for the limitations concerning the structure of the can end set out in element a) of independent claims 11, 24 and 34 can be found, *inter alia*, in Figure 4 and at page 5, lines 3-9, and page 5, lines 20-23. Support for the chuck wall angles recited in claims 14, 17, 26, 28, 35, and 37 can be found, *inter alia*, at page 5, lines 8-9 and in Table 6 on page 13. Support for the limitations found in elements b) and c) of independent claims 11, 24 and 34 can be found, *inter alia*, in Figure 5 and at page 6, lines 17-19. Support for elements d), e) and f) of independent claims 11, 24 and 34 may be found, *inter alia*, in Figures 6 and 7 and at page 6, line 21, to page 7, line 13. Support for the reference to bending a portion of the wall of the can end by an angle of at least about 16° recited in element e) of claim 34 and in claims 12 and 25, and by an angle of at least about 26° recited in claims 16, 27, and 36, and by an angle of at least about 36° recited in claims 19, 29, 38 and may be found, *inter alia*, in Figure 7 and at page 5, lines 8-9, and in Table 6 on page 13, and on page 6, lines 17-19 -- recognizing that when, as shown in Figure 7, a portion of the chuck wall 24 of the can end that is originally inclined at an angle of at least about 20° is pressed against the substantially cylindrical portion 33 of the chuck wall, which is oriented at an angle of +/- 4°, such portion of the chuck wall 24 of the can end will be bent by an angle of at least about 16° (*i.e.*, $20^\circ - 4^\circ = 16^\circ$), and that when the chuck wall 24 of the can end is originally inclined at an angle of at least about 30°, it will be bent by an angle of at least about 26°, and when the chuck wall 24 of the can end is originally inclined at an angle of at least about 40°, it will be bent by an angle of at least about 36°. Support for claims 22, 31, and 39 may be found, *inter alia*, in Figures 4-7 and at page 7, lines 4-13. Support for claims 33 and 41 may be found, *inter alia*, at page 10, lines 4-5, and page 10, line 25, to page 11, line 2.

Support for apparatus claims 42-49 may be found, *inter alia*, at page 6, lines 12-27, and Figures 1 and 5-7.

Regarding the amendments to the table, the specification on page 12, lines 8-11, explains that Table 6 relates to "can ends when joined to containers containing pressurized beverage[s]." Thus, Table 6, in the columns referring to can ends, refers to can ends after seaming onto a can

body, as distinguished from an unseamed can end. The amendments to the table headings submitted herein merely correct typographical or inadvertent errors to make it clear that the data relates to seamed can ends, and thereby conform the table to other portions of the specification.

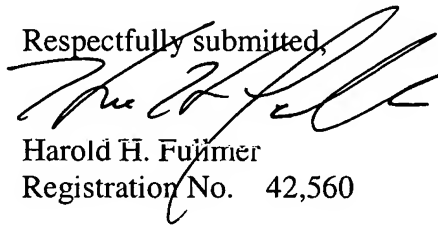
In this regard, the heading of the first column is amended to recite "OD:ID", rather than "O:D:ID" as inadvertently submitted in the as-filed table. The heading of the second column is amended to delete the reference to " d_2 ", as the "OVERALL DIA[METER]" of the seamed can end is the curled diameter, for which there is no reference letter or numeral. Similarly, the heading of the first column is also amended to delete the reference to " $d_2.d_1$ ", and the heading of the fourth column is amended to replace " $D_2.D_1$ " with "OVERALL DIA: PANEL DIA.". The heading of column 5 is changed from "B°" to "C°" to reflect that the column provides the angle relating to the "chuck wall 24" of the can end, as distinguished from the "surface 32" of the "chuck 30," as shown in Figures 4 and 5.

Attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attached page is captioned "Version With Markings To Show Changes Made."

CONCLUSION

Applicants request favorable examination of the new claims. If the examiner determines that a telephone conference would further prosecution of the pending claims, he is invited to telephone the undersigned at his convenience.

Respectfully submitted,



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New claims 11-51 are added.

The Cross-Reference to Related Applications, at Page 1, after the title, has been amended as follows:

Cross-Reference to Related Applications

This is a continuation of United States Patent Application Number 09/650,664, filed August 30, 2000, which is a continuation of United States Patent Application Number 09/552,668, filed April 19, 2000, now abandoned, which is a continuation of United States Patent Application Number 0[8]9/945,698, filed November 21, 1997, which issued May 23, 2000 as U.S. Patent 6,065,634, which is the U.S. National Phase of PCT/GB96/00709, filed March 25, 1996, which claims priority to UK 9510515.1, filed May 24, 1995.

Table 6, which appears on page 13 of the substitute specification and page 17 of the as-filed specification:

TABLE 6

END SIZE Bead OD:ID [0:0:ID] [d ₂ :d ₁]	OVERALL DIA [d ₂] mm	PANEL DIA d ₁ mm	RATIO OVERALL DIA: PANEL DIA [D ₂ /D ₁]	CHUCK WALL ANGLE [B] _C °	CHUCK WALL LENGTH L mm	RE- ENFORCING RAD r ₃ mm	INNER WALL HEIGHT h ₃ mm	OUTER WALL HEIGHT h ₄ mm	PREDICTED CUT EDGE Ø (*DENOTES ACTUAL)	ACTUAL THICKNESS TO CONTAIN PSI
206-204	64.39 (2.535")	49.49 (1.9485")	1.3010	33.07°	4.22 (0.166")	0.52 (0.0204")	2.34 (0.092")	1.78 (0.070")	75.230 (2.9618")	0.255
206-202	64.39 (2.535")	47.33 (1.8634")	1.3604	42.69°	4.95 (0.195")	0.52 (0.0204")	2.34 (0.092")	1.78 (0.070")	74.272 (2.9241")*	0.255
206-200	64.39 (2.535")	45.07 (1.7744")	1.4287	50.053°	5.82 (0.229")	0.52 (0.0204")	2.34 (0.092")	1.78 (0.070")	73.713 (2.9021")	0.255
204-202	62.18 (2.448")	47.33 (1.8634")	1.3137	29.78°	3.96 (0.156")	0.52 (0.0204")	2.34 (0.092")	1.78 (0.070")	73.767 (2.9042")	0.24
204-200	62.18 (2.448")	45.07 (1.7744")	1.3796	40.786°	4.70 (0.185")	0.52 (0.0204")	2.34 (0.092")	1.78 (0.070")	72.911 (2.8705")	0.24
202-200	71.98 (2.834")	45.07 (1.7744")	1.597	30.266°	4.09 (0.161")	0.52 (0.0204")	2.34 (0.092")	1.78 (0.070")	71.984 (2.834")	0.225
206 std	64.69 (2.547")	51.92 (2.044")	1.2461	15.488°	4.39 (0.173")	0.56 (0.022")	2.03 (0.080")	-	76.454 (3.010")*	0.28
KRASKA ESTIMATE	64.39 (eg 2.535")	-	-	15°	2.54 (0.100")	0.81 (0.032")	1.65 (0.065")	2.29 (0.090")	78.080 (3.074")	0.292 (0.0115")
All experiments modelled on a notional aluminium alloy of yield strength 310 mpa 0.25 mm thick. The standard was also 310 mpa BUT 0.275 mm thick.										